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TITLE: Level control for a voltage  
controlled oscillator

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Brief Summary Text - BSTX (2):

This invention relates generally to voltage controlled oscillators and more particularly to voltage controlled oscillators having an automatic gain control circuit.

Brief Summary Text - BSTX (5):

To correct this problem, some VCO's have employed automatic gain control (AGC) circuits wherein the output level of the VCO is held constant. This is generally accomplished by detecting the output level of the VCO and providing a feedback signal to adjust the gain of the oscillator. Once the output level is established, the minimum steering line voltage can be set greater than the peak RF voltage level to prevent rectification. While this technique generally provides satisfactory VCO performance, the limited output level requires subsequent amplification (in a transceiver realization) to provide sufficient power to the mixers or other subsequent circuitry. Thus, limiting the output power of the VCO to improve rectification spur performance is adverse to the overall operation of the frequency synthesizer since the signal must be reamplified, and then relimited, to provide an acceptable signal to the mixer.

Drawing Description Text - DRTX (3):

FIG. 1 is a schematic diagram of a typical voltage controlled oscillator circuit having an AGC circuit in accordance with the prior art;

Drawing Description Text - DRTX (4):

FIG. 2 is a schematic diagram of a voltage controlled oscillator having an improved AGC circuit in accordance with the present invention;